

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte EDWARD F. ALLINA

Appeal No. 97-1002
Application 08/014,379¹

ON BRIEF

Before JERRY SMITH, FLEMING and CRAWFORD, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed February 5, 1993. According to appellant, the application is a continuation-in-part of Application 07/479,856, filed February 14, 1990, now abandoned, which is a continuation-in-part of Application 06/923,524, filed October 28, 1986, now U.S. Patent No. 4,931,895, issued June 5, 1990.

Appeal No. 97-1002
Application 08/014,379

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-27, which constituted all the claims in the application. An amendment after final rejection was filed on February 22, 1996 and was entered by the examiner. This amendment cancelled claims 6-13 and 22-27. An initial (revised) appeal brief was filed on February 22, 1996 appealing the rejection as to claims 1-5 and 14-21. The examiner entered several new grounds of rejection in response to the appeal brief. Appellant filed a reply brief on June 21, 1996 in which the appeal was waived (withdrawn) with respect to claims 1-3. Accordingly, this appeal now involves only claims 4, 5 and 14-21.

The claimed invention pertains to a method and apparatus for protecting an electrical utility watt-hour meter and the corresponding metered circuitry from the damage caused by transient voltage surges.

Representative claim 14 is reproduced as follows:

14. Transient voltage surge suppression (TVSS) apparatus adapted to protect a watt-hour meter and electrical equipment metered thereby from lightning or switching transient voltage surges, comprising a circuit board

(i) carrying means substantially non-conductive at normal power voltage but conductive at higher voltages, including varistors as the sole variable resistance components thereof adapted to clip transient voltage surges and shunt surge currents to ground,

Appeal No. 97-1002
Application 08/014,379

(ii) being adapted to fit around the blade-like terminals normally protruding from a watt-hour meter into jaws of a powered socket within an electrical utility box or panel, and

(iii) further adapted to be supported at least in part by contact with whatever blade-like terminals may engage the jaws of the socket.

The examiner relies on the following references from rejections made in the final rejection:

St. John	2,606,232	Aug. 05, 1952
Zisa	3,725,745	Apr. 03, 1973
Melanson	3,914,657	Oct. 21, 1975
Farrar et al. (Farrar)	4,726,638	Feb. 23, 1988
Rozanski et al. (Rozanski)	4,875,137	Oct. 17, 1989
Brady	5,010,438	Apr. 23, 1991

The examiner relies on the following reference from new rejections made in the examiner's answer:

Dell Orfano	4,089,032	May 09, 1978
-------------	-----------	--------------

Claims 4, 5 and 14-21 stand rejected under 35 U.S.C.

§ 103. The rejections of the appealed claims are set forth by the examiner as follows:

1. Claims 4, 5 and 14-17 are rejected under 35 U.S.C. § 103 as being unpatentable over Zisa in view of Melanson.

2. Claims 18 and 19 are rejected under 35 U.S.C. § 103 as being unpatentable over Zisa in view of Melanson, Rozanski and Brady.

3. Claims 20 and 21 are rejected under 35 U.S.C. § 103 as being unpatentable over St. John in view of Farrar.

4. Claims 4, 5 and 14-17 are rejected under 35 U.S.C. § 103 as being unpatentable over Zisa in view of Melanson and Dell Orfano.

Appeal No. 97-1002
Application 08/014,379

5. Claims 18 and 19 are rejected under 35 U.S.C. § 103 as being unpatentable over Zisa in view of Melanson and Dell Orfano, and further in view of Brady and Rozanski.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answers for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answers.

It is our view, after consideration of the record before us, that the collective evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 4, 5 and 14-21. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837

Appeal No. 97-1002
Application 08/014,379

F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

1. The rejection of claims 4, 5 and 14-17 as unpatentable over Zisa and Melanson.

We note at the outset that dependent claims 4 and 5 depend from non-appealed independent claim 1. The briefs primarily argue two limitations of these claims which are allegedly not taught by the applied references. First, appellant argues that neither Zisa nor Melanson teaches "varistors as the sole components...adapted to clip transient voltage surges and to shunt surge current to ground" as recited in independent claims 1 and 14. Second, appellant argues that neither Zisa nor Melanson teaches the supporting of the surge suppression apparatus by the blade-like terminals of a watt-hour meter.

With respect to the first point, the examiner argues that it would have been obvious to the artisan to remove the spark gap in Zisa or Melanson so as to operate with varistors alone. The motivation would allegedly be to reduce the number of components [answer, page 9]. With respect to the second point, the examiner relies on Zisa as teaching supporting the surge suppression apparatus on the blade-like terminals of the watt-hour meter.

After a careful review of the applied references and the arguments of appellant and the examiner, we find ourselves in agreement with appellant on both points. The examiner and appellant agree that Zisa discloses a circuit made up of a variable resistance current limiter in series with an arc

discharge arrangement. There is agreement that Melanson teaches the use of a disk-shaped varistor wafer in series with a gap electrode. Thus, neither of these references teaches a transient voltage surge suppression circuit using only varistors as claimed. Although the examiner argues that it would have been obvious to eliminate the spark gap from the references, there is no suggestion for this modification in either Zisa or Melanson. If Zisa and Melanson could have achieved the same function without the spark gap, they were apparently not aware of it. Any suggestion to use only varistors with no other components for clipping transient voltage surges and shunting surge currents to ground comes from appellant's own disclosure and not from the teachings of the applied prior art. Thus, this particular feature of independent claims 1 and 14 is not taught or suggested by the applied references. This finding alone is sufficient for us not to sustain this particular rejection of claims 4, 5 and 14-17.

Notwithstanding our decision to reverse this rejection of claims 4, 5 and 14-17 based on the first point argued above, we consider the second point as well in order to provide guidance to appellant and the examiner. It is sufficient to say that the patents to Zisa and Melanson do not support the teachings

attributed to them by the examiner. Melanson clearly shows the surge suppression circuitry connected within and supported by the baseplate 10 of the watt-hour meter. There is no support received from the blade-like terminals of the meter. Zisa shows a blade like terminal 20 connected to the meter circuitry but not connected to the surge suppression circuitry. It is also clear that the terminal 20 does not provide support for the surge suppression circuitry 24 because this device is clearly supported by base 18 as described by Zisa [column 2, lines 60-63]. Thus, based upon this record, the applied prior art does not support the teachings found by the examiner. Therefore, this reason alone would also have been sufficient for us to reverse this particular rejection of claims 4, 5 and 14-17.

2. The rejection of claims 18 and 19 as
unpatentable over Zisa, Melanson,
Rozanski and Brady.

These claims depend from independent claim 14 and, therefore, incorporate all the limitations of claim 14 just discussed. Zisa and Melanson are insufficient to support the rejection for reasons discussed above. Rozanski and Brady were cited to meet particular mounting features of the varistors, but they do not overcome the innate deficiencies of Zisa and Melanson

which were discussed above. Therefore, we do not sustain the rejection of claims 18 and 19 for the reasons discussed above.

3. The rejection of claims 20 and 21 as unpatentable over St. John and Farrar.

Claims 20 and 21 are independent claims which contain neither of the features discussed above. Rather, claims 20 and 21 recite a transient voltage surge suppression circuit board means having "sidewise flexing contactors" contacting the protruding terminals of a watt-hour meter. Appellant makes two main arguments in opposition to this rejection. First, appellant argues that there is no basis to combine the low voltage d.c. transient suppression teachings of Farrar with the watt-hour meter of St. John [brief, page 18; reply brief, pages 7-8]. Second, appellant argues that there is no teaching of the sidewise flexing contactors in Farrar as alleged by the examiner [brief, page 19]. The examiner responds that the breadth of these claims permits the combination of Farrar's teachings with those of St. John, and the flexing contactors are taught either by contacts 32 and 36 of Farrar or contacts 34 and 36 of St. John [answer, pages 11-12]. We have again carefully considered the record before us, and we find ourselves in agreement with appellant.

Although Farrar does teach a device for protecting against voltage surges, the invention is for use in protecting integrated circuit components which are packed into extremely small spaces and for retrofitting existing electrical circuit connectors. We fail to see how the Farrar device which is designed for closely packed integrated circuits would have relevance to the watt-hour meter of St. John. None of the problems sought to be overcome by Farrar would be expected to exist in the St. John watt-hour meter. Therefore, we agree with appellant that the teachings of Farrar and St. John do not suggest their combination in a manner to meet the invention of claims 20 and 21.

We also agree with appellant that neither Farrar nor St. John suggests anything comparable to a sidewise flexing contactor as recited in claims 20 and 21. The items identified by the examiner are simply apertures or contact points and have nothing to do with contactors for contacting the protruding terminals of a watt-hour meter as claimed. Thus, even if Farrar and St. John could be combined as proposed by the examiner, there would still be no teaching of the "sidewise flexing contactors" as recited in claims 20 and 21. Therefore, we do not sustain this rejection of claims 20 and 21.

4. The rejection of claims 4, 5 and 14-17 as unpatentable over Zisa, Melanson and Dell Orfano.

This rejection is similar to the first rejection discussed above except that Dell Orfano is added to the collective teachings. Dell Orfano is added to the combination because it teaches a transient voltage surge suppressor using only varistors to clip the voltage and shunt the surge current to ground. We agree with the examiner that Dell Orfano would be sufficient to overcome the first deficiency in the Zisa-Melanson combination discussed above. That is, we agree that Dell Orfano would have suggested to the artisan the obviousness of using varistors only to clip voltage surges and shunt surge currents to ground. Nevertheless, the second deficiency of the Zisa-Melanson combination discussed above is not corrected by the addition of Dell Orfano as applied by the examiner. The examiner does not rely on Dell Orfano at all to teach supporting the surge suppressor circuit on the blade-like terminals of a watt-hour meter. The examiner still relies on Zisa and Melanson for this teaching which, as noted above, is not supported by the reference teachings. Therefore, this rejection still lacks a valid explanation as to why the claimed support by the blade-like terminals would have been obvious in view of the applied prior

Appeal No. 97-1002
Application 08/014,379

art. Accordingly, we do not sustain this rejection of claims 4, 5 and 14-17.

5. The rejection of claims 18 and 19 as unpatentable over Zisa, Melanson, Dell Orfano, Brady and Rozanski.

This rejection is just like the second rejection discussed above except that Dell Orfano is again added to the combination of patents used to reject these claims. For the same reasons we have just discussed, Dell Orfano does not overcome the deficiencies previously noted in the rejection of claims 18 and 19. Therefore, we also do not sustain this rejection of claims 18 and 19.

In summary, we have not sustained any of the examiner's rejections of the claims on appeal. Therefore, the decision of the examiner rejecting claims 4, 5 and 14-21 is reversed.

REVERSED

Appeal No. 97-1002
Application 08/014,379

JERRY SMITH)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
MICHAEL R. FLEMING)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
MURRIEL E. CRAWFORD)	
Administrative Patent Judge)	

Charles A. McClure
P. O. Box 1168
Tampa, FL 33601